

[19]中华人民共和国国家知识产权局

[51]Int. Cl⁶

[12] 发明专利申请公开说明书

[21] 申请号 97198275.9

A23L 1/304
 A23L 1/30 A23G 1/00
 A61K 33/26 A61K 33/28
 A61K 33/30 A61K 33/32
 A61K 33/34 A61K 33/24
 A61K 9/127

[43]公开日 1999年10月13日

[11]公开号 CN 1231582A

[22]申请日 97.8.28 [21]申请号 97198275.9

[30]优先权

[32]96.8.29 [33]US [31]08/705,458

[86]国际申请 PCT/US97/15124 97.8.28

[87]国际公布 WO98/08401 英 98.3.5

[83]进入国家阶段日期 99.3.26

[71]申请人 普罗克特和甘保尔公司

地址 美国俄亥俄州

[72]发明人 H·梅哈斯 R·I·梅利坎

T·特里恩

[74]专利代理机构 中国国际贸易促进委员会专利商标事
务所

代理人 黄淑辉

权利要求书3页 说明书20页 附图页数0页

[54]发明名称 在包含二价金属盐的营养组合剂中形成双
层的乳化剂的应用

[57]摘要

一种营养组合剂,它包括食用载体和在载体上的二
价无机盐(Fe、Ca、Zn、Cu、Mg、Mn),所述载体包含能形
成双层结构(囊泡或脂质体)的乳化剂。尤其要求保护
一种铁营养组合剂,它包含生物可利用的铁源,选自富
马酸亚铁和琥珀酸亚铁,其中铁源优选施加在卵磷脂包
裹的食用载体如蔗糖的表面。这些铁营养组合剂尤其
适用于食品和饮料,例如巧克力风味的食用混合物,尤
其是巧克力风味的饮料,这些产品另外用其它的矿物质
和维生素强化,尤其是多矿物质和维生素组合,该组合
涉及铁、维生素A、维生素C、核黄素和叶酸,以避免产生
不期望的色泽、后味、涩味,尤其是当食用食品或/或饮料
混合物用水或牛奶复水时。

ISSN 1000-8427 4

专利文献出版社出版

Family list

18 family members for: CN1231582

Derived from 15 applications

- 1 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components
Inventor: MEHANSHO HAILE (US); MELLICAN RENE E IRVINE (US); (+1)
EC: A23G1/30; A23C9/152B; (+14) **IPC:** A23G1/30; A23C9/152; A23C9/154 (+58)
Publication Info: AT215319T T - 2002-04-15
Applicant: PROCTER & GAMBLE (US)
- 2 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent metal salts
Inventor: MEHANSHO HAILE; MELLICAN RENE E IRVINE; (+1)
EC: A23G1/30; A23C9/152B; (+14) **IPC:** A23G1/30; A23C9/152; A23C9/154 (+60)
Publication Info: AU4093597 A - 1998-03-19
Applicant: PROCTER & GAMBLE
- 3 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components
Inventor: MEHANSHO HAILE; MELLICAN RENE E IRVINE; (+1)
EC: A23G1/30; A23C9/152B; (+14) **IPC:** A23G1/30; A23C9/152; A23C9/154 (+59)
Publication info: BR9713187 A - 1999-11-03
Applicant: PROCTER & GAMBLE (US)
- 4 USE OF BILAYER FORMING EMULSIFIERS IN NUTRITIONAL COMPOSITIONS COMPRISING DIVALENT METAL SALTS
Inventor: TRINH TOAN (US); MELLICAN RENE E IRVINE (US); (+1)
EC: A23G1/30; A23C9/152B; (+14) **IPC:** A23G1/30; A23C9/152; A23C9/154 (+54)
Publication info: CA2264394 A1 - 1998-03-05
CA2264394 C - 2003-12-23
Applicant: PROCTER & GAMBLE (US)
- 5 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent metal salts
Inventor: MEHANSHO H (US); MELLICAN R I (US); (+1)
EC: A23G1/30; A23C9/152B; (+14) **IPC:** A23G1/30; A23C9/152; A23C9/154 (+59)
Publication info: CN1074660C C - 2001-11-14
CN1231582 A - 1999-10-13
Applicant: PROCTER & GAMBLE (US)
- 6 No title available
Inventor: **Applicant:**
EC: **IPC:**
Publication Info: DE69711646D D1 - 2002-05-08
- 7 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components
Inventor: MEHANSHO HAILE (US); MELLICAN RENE E IRVINE (US); (+1)
EC: A23G1/30; A23C9/152B; (+14) **IPC:** A23G1/30; A23C9/152; A23C9/154 (+60)
Publication Info: DE69711646T T2 - 2002-11-28
Applicant: PROCTER & GAMBLE (US)
- 8 USE OF BILAYER FORMING EMULSIFIERS IN NUTRITIONAL COMPOSITIONS COMPRISING DIVALENT METAL SALTS
Inventor: MEHANSHO HAILE (US); MELLICAN RENE E IRVINE (US); (+1)
EC: A23G1/30; A23C9/152B; (+14) **IPC:** A23G1/30; A23C9/152; A23C9/154 (+60)
Publication info: EP0924996 A1 - 1999-06-30
EP0924996 B1 - 2002-04-03
Applicant: PROCTER & GAMBLE (US)
- 9 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and

Interactions with other dietary components**Inventor:** MEHANSHO HAILE (US); MELLICAN
RENEE IRVINE (US); (+1)**Applicant:** PROCTER & GAMBLE**EC:** A23G1/30; A23C9/152B; (+14)**IPC:** A23G1/30; A23C9/152; A23C9/154 (+60)**Publication Info:** ES2174279T T3 - 2002-11-01

- 10 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components**

Inventor: HAILE MEHANSHO (US); TOAN TRINH
(US); (+1)**Applicant:** PROCTER & GAMBLE (US)**EC:** A23G1/30; A23C9/152B; (+14)**IPC:** A23G1/30; A23C9/152; A23C9/154 (+51)**Publication Info:** ID18198 A - 1998-03-12

- 11 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components**

Inventor:**Applicant:****EC:** A23G1/30; A23C9/152B; (+14)**IPC:** A23G1/30; A23C9/152; A23C9/154 (+57)**Publication Info:** JP3245180B2 B2 - 2002-01-07

- 12 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components**

Inventor:**Applicant:****EC:** A23G1/30; A23C9/152B; (+14)**IPC:** A23G1/30; A23C9/152; A23C9/154 (+65)**Publication Info:** JP2000501622T T - 2000-02-15

- 13 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components**

Inventor: MEHANSHO HAILE (US); MELLICAN
RENEE IRVINE (US); (+1)**Applicant:** PROCTER & GAMBLE (US)**EC:** A23G1/30; A23C9/152B; (+14)**IPC:** A23G1/30; A23C9/152; A23C9/154 (+51)**Publication Info:** US5707670 A - 1998-01-13

- 14 Use of bilayer forming emulsifiers in nutritional compositions comprising divalent mineral salts to minimize off-tastes and interactions with other dietary components**

Inventor: MEHANSHO HAILE (US); MELLICAN
RENEE IRVINE (US); (+1)**Applicant:** PROCTER & GAMBLE (US)**EC:** A23G1/30; A23C9/152B; (+14)**IPC:** A23G1/30; A23C9/152; A23C9/154 (+51)**Publication Info:** US5888563 A - 1999-03-30

- 15 USE OF BILAYER FORMING EMULSIFIERS IN NUTRITIONAL COMPOSITIONS COMPRISING DIVALENT METAL SALTS**

Inventor: MEHANSHO HAILE; MELLICAN RENEE
IRVINE; (+1)**Applicant:** PROCTER & GAMBLE (US)**EC:** A23G1/30; A23C9/152B; (+14)**IPC:** A23G1/30; A23C9/152; A23C9/154 (+60)**Publication Info:** WO9808401 A1 - 1998-03-05

Data supplied from the esp@cenet database - Worldwide